

REMARKS / ARGUMENTS

The present disclosure is objected to because of the following informalities: Paragraph [01] needs to be updated with serial number, date, and status (publication number if published) of cited application. The Applicant has amended the specification as set forth above to overcome this informality.

The present application includes pending claims 1-30, all of which have been rejected. By this Amendment, claims 2-9 and 11-19 have been amended, as set forth above, to further clarify the language used in these claims and to further prosecution of the present application. The Applicant respectfully submits that the claims define patentable subject matter.

Initially, the Applicant notes that a goal of patent examination is to provide a prompt and complete examination of a patent application.

It is essential that patent applicants obtain a prompt yet complete examination of their applications. Under the principles of compact prosecution, each claim should be reviewed for compliance with every statutory requirement for patentability in the *initial review* of the application, even if one or more claims are found to be deficient with respect to some statutory requirement. Thus, Office personnel *should* state *all* reasons and bases for rejecting claims in the *first* Office action. Deficiencies should be explained clearly, particularly when they serve as a basis for a rejection. Whenever practicable, Office personnel should indicate how rejections may be overcome and how problems may be resolved. A failure to follow this approach can lead to unnecessary delays in the prosecution of the application.

See Manual of Patent Examining Procedure (MPEP) § 2106(II). As such, the Applicant assumes, based on the goals of patent examination noted above, that

the present Office Action has set forth "all reasons and bases" for rejecting the claims.

Claims 11-20 stand rejected under 35 U.S.C. § 101 as being directed to non-statutory subject matter. Claims 1, 11 and 21 stand provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claim 1, 11, and 21 of co-pending application No. 10/612,729 in view of US Patent No. 5,923,663, issued to Bontemps et al. (hereinafter, Bontemps). Claims 1-30 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Bontemps. The Applicant respectfully traverses these rejections at least for the reasons previously set forth during prosecution and at least based on the following remarks.

REJECTION UNDER DOUBLE PATENTING

Claims 1, 11 and 21 are provisionally rejected on the ground of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 11 and 21 of copending application no. 10/612,729. The Applicant traverses these rejections that are based on non-statutory obviousness-type double patenting. Notwithstanding, in an effort to further prosecution of the present application, the Applicant is submitting herewith a Terminal Disclaimer in compliance with 37 C.F.R. §1.321(c), to overcome the double patenting rejection.

REJECTION UNDER 35 U.S.C. § 101

The Applicant now turns to the rejection of claims 11-20 under 35 U.S.C. § 101 as being directed to non-statutory subject matter. The Office Action refers to MPEP §2106(IV)(B)(1) and states that claims 11-20 are considered non-statutory subject matter since it is not a machine, manufacture, process or composition of matter. Furthermore, the Examiner states that claims 11-20 lack the proper preamble language for statutory computer program products. The Examiner suggests "A computer readable medium containing computer executable instructions to perform a method, the method comprising:"

Initially, the Applicant notes that the MPEP § 706.03 states on the subject of rejection not based on prior art:

The primary object of the examination of an application is to determine whether or not the claims are patentable over the prior art. This consideration should not be relegated to a secondary position while undue emphasis is given to nonprior art or "technical" rejections. Effort in examining should be concentrated on truly essential matters, minimizing or eliminating effort on technical rejection which are not really critical. Where a major technical rejection is proper (e.g., lack of proper disclosure, undue breadth, utility, etc..) such rejection should be stated with a full development of the reasons rather than by a mere conclusion coupled with some stereotyped expression.

The applicant respectfully submits that the rejection of claims 11-20 under 35 U.S.C. § 101 as being directed to non-statutory subject matter be withdrawn since the Applicant believes claims 11-20 are statutory under 35 U.S.C. §101, as

addressed below. In particular, the Applicant considers the suggested preamble language of "A computer readable medium containing computer executable instructions to perform a method" as too narrow in scope.⁵

The Office Action states that "Regarding Claims 11-20, the claimed machine-readable storage is nonstatutory subject matter since it's not a machine, process, or composition of matter." The Applicant points out that the scope of 35 U.S.C. § 101 is the same regardless of the form or category of invention in which a particular claim is drafted. See AT&T, 172 F.3d at 1357, 50 USPQ2d at 1451. See also State Street, 149 F.3d at 1375, 47 USPQ2d at 1602 wherein the Federal Circuit explained:

The question of whether a claim encompasses statutory subject matter should not focus on which of the four categories of subject matter a claim is directed to -- process, machine, manufacture, or composition of matter--[provided the subject matter falls into at least one category of statutory subject matter] but rather on the essential characteristics of the subject matter, in particular, its practical utility.

For example, a claimed invention may be a combination of devices that appear to be directed to a machine and one or more steps of the functions performed by the machine. Such instances of mixed attributes, although potentially confusing as to which category of patentable subject matter it belongs in, does not affect the analysis to be performed by the Examiner. Note that an apparatus claim with process steps is not classified as a "hybrid" claim; instead, it is simply an apparatus claim including functional limitations. See, e.g., R.A.C.C. Indus. v. Stun-Tech, Inc.,

178 F.3d 1309 (Fed. Cir. 1998). The preamble of amended claim 11 by the Applicant states: "A **machine-readable storage** having stored thereon, a program having at least one code section for providing and configuring communication links, the at least one code section **being executable by a machine for causing the machine to perform steps comprising:**" In light of the above, the Applicant submits claims 11-20 to be allowable. The Applicant further notes that the burden is on the USPTO to set forth a prima facie case of unpatentability. Therefore, if the Examiner determines that it is more likely than not that the claimed subject matter falls outside all the statutory categories, the Examiner must provide an explanation.

The Office Action refers for support to MPEP §2106(IV)(B)(1), that states:

Claims to computer-related inventions that are clearly nonstatutory fall into the same general categories as nonstatutory claims in other arts, namely natural phenomena such as magnetism, and abstract ideas or laws of nature which constitute "descriptive material".

and

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works, and a compilation or mere arrangement of data.

The Applicant points out that the preamble in amended claim 11 recites "a program for providing and configuring communication links" and "the at least one code section being executable by a machine for causing the machine to perform

steps comprising". Therefore, the preamble of claim 11 is "functional descriptive material".

More importantly, the Applicant draws the Examiner's attention to the following citation in the MPEP:

Computer programs are often recited as part of a claim. Office personnel should determine whether the computer program is being claimed as part of an otherwise statutory manufacture or machine. In such a case, the claim remains statutory irrespective of the fact that a computer program is included in the claim. **The same result occurs when a computer program is used in a computerized process** where the computer executes the instructions set forth in the computer program. **Only when the claimed invention taken as a whole is directed to a mere program listing, i.e., to only its description or expression, is it descriptive material *per se* and hence nonstatutory.** See, MPEP §2106(IV)(B)(1)(a).

Since the Applicant's claim 11 states: "A machine-readable storage, having stored thereon, ... at least one code section being executable by a machine ...", the applicant respectfully submits that the preamble of amended claim 11 is not descriptive material *per se*.

Moreover, MPEP §2106(IV)(B)(2)(b) recites:

"A claimed process is clearly statutory if it results in a physical transformation outside the computer, i.e. falls into one or both of the following specific categories ("safe harbors")."

i) "A process is statutory if it requires physical acts to be performed outside the computer independent of and following the steps to be performed by a programmed computer, where those acts involve the manipulation of tangible physical objects and result in the object having a different physical attribute or structure. *Diamond v. Diehr*, 450 U.S. at 187, 209 USPQ at 8. Thus, if a process claim includes one or more post-computer process steps that result in a physical transformation outside the computer (beyond merely conveying the direct result of the computer operation), the claim is clearly statutory."

Since the Applicant's preamble to claim 11 recites "providing and configuring

a communications link", the Applicant submits that "a physical transformation outside the computer" according to MPEP §2106(IV)(B)(2)(b)(i) takes place and the preamble to claim 11 be declared statutory.

Finally, the Applicant argues that the preamble suggested by the Examiner in the Office Action is too narrow and may lead to an overly restrictive interpretation of the Applicant's preamble to claim 11. In particular, the Applicant submits that "computer readable medium" is unnecessarily narrow. The term "computer" is defined, for example, by the Oxford American Dictionary as 'an electronic device for storing and processing data, typically in binary form, according to instructions given to it in a variable program'. The Applicant submits that this and other definitions of "computer" may unnecessarily limit the scope of the Applicant's invention. For example, certain definitions of "computer" may exclude microcontrollers or embodiments without microprocessor etc. Similarly, the term "medium" is defined, for example, by the Oxford American Dictionary in the context of computing as 'a particular form of storage of digitized information, such as magnetic tape or disc'. This definition is inadequate since it explicitly precludes the use of analog, that is non-digitized, storage formats.

The Applicant hence respectfully submits that the usage of "machine-readable storage" is allowed over "computer readable medium" in order to avoid limiting the scope of claim 11 unnecessarily. Moreover, the Applicant notes that a quick search of issued patents on the PTO website reveals that more than 8500 U.S. patents have issued with the "machine-readable" language in the claims, clearly demonstrating that such language is statutory. Since the rejection of claim 11 under 35 U.S.C. §101 as being directed to non-statutory subject matter has been overcome for at least the reasons given above, and the claims 12-20 depend on independent claim 11, the Applicant respectfully submits that the rejection of 11-20 under 35 U.S.C. §101 be withdrawn and the claims made allowable.

The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 11-20.

REJECTION UNDER 35 U.S.C. § 102

I. Bontemps Does Not Anticipate Claims 1, 11 and 21

The Applicant now turns to the rejection of claims 1, 11 and 21 under 35 U.S.C. 102(b) as being anticipated by Bontemps. With regard to the anticipation rejections under 102(b), MPEP §2131 states that “[a] claim is anticipated only if **each and every element** as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” See Manual of Patent Examining Procedure (MPEP) at 2131 (internal citation omitted). Furthermore, “[t]he identical invention must be shown in as complete detail as is contained in the ... claim.” See *id.* (internal citation omitted).

A. Rejection of Independent Claim 1 under 35 U.S.C. § 102 (b)

With regard to the rejection of independent claim 1 under 35 U.S.C. § 102(b), the Applicant submits that Bontemps does not disclose or suggest at least the limitation of “determining any one usable media pair from all existing media pairs”, as recited by the Applicant in independent claim 1. More specifically, Bontemps does not teach “determine any one usable media pair” and “from all

existing media pairs". The Office Action refers for support to col. 3, lines 58-62 in Bontemps:

A control circuit is provided that toggles the select circuit between the first and second states until a link detect signal indicates reception of communication signals. The control circuit holds the select circuit in the particular state in which valid communication signals were detected.

The Applicant fails to see how the above cited paragraph may disclose the Applicant's limitation of "determining any one usable media pair from all existing media pairs". In particular, the only entity performing any action in the cited paragraph appears to be the control circuit. Hence, the control circuit would have to provide any "determining any one usable media pair from all existing media pairs". However, according to the above citation, the control circuit "toggles" the select circuit, and "holds" the select circuit when "a link detect signal indicates reception of a communication signal". This does not appear to be related to the Applicant's claim of "determining any one **usable** media pair **from all existing media pairs**", since no reference to "usable", "media pair" is made in the cited paragraph.

The Applicant therefore respectfully submits that the rejection of claim 1 under 35 U.S.C. §102(b) is withdrawn and the claim made allowable. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claim 1.

Additionally, each PHY device 218 in FIG. 2 of Bontemps is connected to one RX/TX pair (e.g. 220a/220b) only. It is hence not possible to "determine any

one usable media pair from all existing media pair". This view is supported by Bontemps in col. 9, line 6-8 where it is stated that "Each PHY device 218 is **coupled to a corresponding media-access control (MAC) device (not shown)** for implementing the MAC data link sub-layer" and col. 10, line 54-56 "If communication signals are detected, then the PHY device 218 asserts a **corresponding LINK_DETECT1 signal high indicating detection of a compliant device.**" Hence, both signal connections to a PHY device 218 in FIG. 2 of Bontemps are unrelated to "**determining** any one **usable** media from **all** existing media pairs". Accordingly, the Applicant respectfully submits that the rejection of claim 1 based on 35 U.S.C. § 102(b) be withdrawn and claim 1 be allowed.

Since independent claims 11 and 21 are in many respects similar to the method disclosed in independent claim 1, the Applicant respectfully submits that independent claims 11 and 21 are also allowable over the references cited in the Office Action for at least the reasons stated above with regard to claim 1. The Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 11 and 21.

B. Rejection of Dependent Claims 2-10, 12-20, 22-30

Based on at least the foregoing, the Applicant believes the rejection of independent claims 1, 11 and 21 under 35 U.S.C. § 102(b) as being anticipated by

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Bontemps has been overcome and requests that the rejection be withdrawn. Additionally, claims 2-10, 12-20 and 22-30 depend from independent claims 1, 11 and 21, respectively, and are, consequently, also respectfully submitted to be allowable.

Applicant also reserves the right to argue additional reasons beyond those set forth above to support the allowability of claims 1-30.

CONCLUSION

Based on at least the foregoing, the Applicant believes that all claims 1-24 are in condition for allowance. If the Examiner disagrees, the Applicant respectfully requests a telephone interview, and request that the Examiner telephone the undersigned Attorney at (312) 775-8176.

The Commissioner is hereby authorized to charge any additional fees or credit any overpayment to the deposit account of McAndrews, Held & Malloy, Ltd., Account No. 13-0017.

A Notice of Allowability is courteously solicited.

Respectfully submitted,

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